IFW

1201.68227   PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re U.S. Patent Application of:)
)
Applicant(s):   Goldberg et al.   )
)
Serial No.:   10/774,676   )
)
Conf. No.:   9439   )
)
Filed: February 9, 2004   )
)
)
For: METHODS AND PROGRAM PRODUCTS   )
     FOR OPTIMIZING PROBLEM CLUSTERING   )
)
Art Unit: 2131   )
)
Examiner: Not yet assigned   )

INFORMATION DISCLOSURE STATEMENT

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

This IDS is submitted under 37 C.F.R. §1.97(b) within either of the following time periods, whichever occurs last:

    (a)   within three months of either the filing date of the national application or the date of entry into the national stage; or

    (b)   before the mailing date of first office action on the merits (i.e., not including actions such as restriction requirements).

Applicant(s) submit herewith Form PTO-1449 (Information Disclosure Citation) together with copies of patents, publications or other information of which applicant(s) are aware, which applicant(s) believe may be material to the examination of this application and for which there may be a duty to disclose in accordance with 37 C.F.R. §1.56. Applicant(s) respectfully submit that the citation of any reference on Form PTO-1449 does not constitute an admission that the reference qualifies as prior art.

It is requested that the information disclosed on the enclosed Form PTO-1449 be made of record in this application.

The Commissioner is hereby authorized to charge any additional fees which may be required to this application under 37 C.F.R.§§1.16-1.17, or to credit any overpayment, to Deposit Account No. 07-2069. A duplicate copy of this sheet is enclosed.
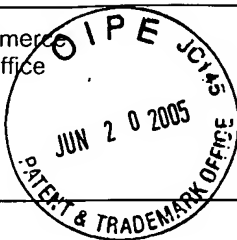
Respectfully submitted,

300 South Wacker Drive – Suite 2500   GREER, BURNS & CRAIN, LTD.
Chicago, Illinois 60606
Telephone: (312) 360-0080
Facsimile: (312) 360-9315   By: _____
Customer Number 24978   Thomas R. Fitzsimons
                                            Registration No. 40,607

Form PTO-1449 U.S. Department of Commerce (Rev. 8-88) Patent and Trademark Office INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)	Attorney Docket No.: 1201.68227		Serial No.: 10/774,676
	Applicant: Goldberg et al.		
	Filing Date: February 9, 2004		Group: 2131

U.S. PATENT DOCUMENTS

Examiner Initial*	Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate

FOREIGN PATENT DOCUMENTS

	Document Number	Date	Country	Class	Subclass	Translation	
						Yes	No

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

	Goldberg, D. E., (1993a). "Making genetic algorithms fly: A lesson from the Wright brothers." *Advanced Technology for Developers, 2,* 1-8.
	Ohsawa, Y., Benson, N. E., & Yachida, M., (1998) "KeyGraph: Automatic indexing by co-occurrence graph based on building construction metaphor." In *Proceedings of Advances in Digital Libraries,* pp. 12-18.
	Takama, Y., & Hirota, K. (2000). "Discovery of topic distribution through WWW information retrieval process." *Proceedings of 2000 IEEE International Conference on Industrial Electronics, Control and Instrumentation,* 1644-1647
	Bingham, E., Kaban, A., & Girolami, M., (2003). "Topic identification in dynamical text by complexity pursuit." *Neural Processing Letters,* 17(1), 69-83.
	Graetz, K., Barlow, C., Proulx, N., & Pape, L. (1997). "Facilitating idea generation in computer-based teleconferences, " *Proceedings of the International ACM SIGGROUP Conference on Supporting Group Work (GROUP '97),* 317-324.
	Santanem, E., Briggs, R., & de Vreede, G. J., (2000). "The Cognitive Network Model of Creativity: a New Casual Model for Creativity and a New Brainstorming Technique," *Proceedings of the 33rd Annual Hawaii International Conference on System Sciences,* 2004.
	Santanem, E., Briggs, R., & de Vreede, G.-J., (2002). "Toward an Understanding of Creative Solution Generation," *Proceedings of the 35th Annual Hawaii International Conference on System Sciences,* 2899-2908.
	Goldberg, D.E., Sastry K., and Ohsawa Y., "Discovering Deep Building Blocks for Competent Genetic Algorithms Using Chance Discovery via KeyGraphs," (2003) pp. 1-23.
	Goldberg, D. E., (1993b). "A Wright-brothers theory of genetic algorithms flight." *Systems, Control, and Information,* 37(8), 450-458.
	Kosorukoff, A., & Goldberg, D. E. (2002). "Evolutionary computation as a form of organization." *Proceedings of the Genetic and Evolutionary Computation Conference (GECCO 2002),* 965-972.
	Takagi, H. (2001). "Interactive evolutionary computation: Fusion of the capabilities of EC optimization and human evaluation." *Proceedings of the IEEE,* 89(9), 1275-1296.
	Welge, M. E., Auvil, L., Shirk, A., Bushell, C., Bajcsy, P., Cai, D., Redman, T., Clutter, D., Aydt, R., & Tcheng, D., (2003). *Data to Knowledge (D2K)* (Automated Learning Group Technical Report). Urbana, IL: National Center for Supercomputing Applications, University of Illinois at Urbana-Champaign.

Examiner	Date Considered

*Examiner: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form PTO-1449 U.S. Department of Commerce (Rev. 8-88) Patent and Trademark Office	Attorney Docket No.: 1201.68227	Serial No.: 10/774,676
INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)	Applicant: Goldberg et al.	
	Filing Date: February 9, 2004	Group: 2131

U.S. PATENT DOCUMENTS

Examiner Initial*		Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate

FOREIGN PATENT DOCUMENTS

		Document Number	Date	Country	Class	Subclass	Translation Yes	No

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

	Altus, S., Kroo, I., & Gage, P., A *Genetic Algorithm for Scheduling and Decomposition of Multidisciplinary Design Problems,* ASME Journal of Mechanical Design, Vol. 118, December 1996.	
	Harik, G., *Linkage learning via probabilistic modeling in the ECGA.* IlliGAL TR-99010, University of Illinois at Urbana-Champaign, Urbana, IL, 1999.	
	Lutz, R., *Recovering High-Level Structure of Software Systems Using a Minimum Description Length Principle,* R.F.E. Proceedings of the 13th Irish International Conference, Artificial Intelligence and Cognitive Science (AICS 2002), September 2002.	
	Munemoto, M., & Goldberg, D.E., *Liknage Identification by Non-monotonocity Detection for Overlapping Functions.* IlliGAL Report No. 99005, Genetic and Evolutionary Computation Conference (GECCO-99), Vol. 1, 1999.	
	Pelikan, M., Goldberg, D.E., & Cantú-Paz, E., *BOA: The Bayesian optimization algorithm.* Proceedings of the Genetic and Evolutionary Computation Conference (GECCO-99), Vol. 1, pp. 525-532. Also IlliGAL TR-99003, University of Illinois at Urbana-Champaign, 1999.	
	Rogers, J. L., *DeMAID/GA User's Guide-Design Manager's Aid for Intelligent Decomposition With a Genetic Algorithm,* NASA TM-110241, April 1996.	
	Salman, A., Mehrota, K., & Mohan, C., *Linkage Crossover for Genetic Algorithms,* Proceedings of the Genetic and Evolutionary Computation Conference (GECCO-99), Vol. 1, pp. 564-571, 1999.	
	Smith, J. *On Appropriate Adaptation Levels for the Learning of Gene Linkage.* Journal of Genetic Programming and Evolvable Machines, Vol. 3, No. 2, pp. 129-155, 2002.	
	Goldberg, D.E., Deb, K., Kargupta, H., Harik, G.: *Rapid, accurate optimization of difficult problems using fast messy genetic algorithms.* Proceedings of the Fifth International Conference on Genetic Algorithms pp. 56-64 (1993).	
	Ohsawa, Y. (2002). Chance discoveries for making decisions in complex real world. *New Generation Computing,* 20 (2), 143-163.	
	Ohsawa, Y., & Nara, Y. (2002). Understanding internet users on double helical model of chance-discovery process. In *Proceedings of the 2002 IEEE International Symposium on Intelligent Control.* pp. 844-849.	

Examiner	Date Considered

*Examiner: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.